

ABSTRACT

[Abstract]

[Task] Bi and hard matters of the Cu-Bi-hard matter based sintered alloy should fully exhibit the respective properties.

[Means for Solution] In a Pb-free copper-based sintered alloy containing from 1 to 30 % of Bi and from 0.1 to 10 % of hard matter particles having from 10 to 50 μ m of average particle diameter, (1) the Bi phase has smaller average particle diameter than that of the hard matter particles and is dispersed in the Cu matrix, or the hard matter particles having 50% or less of a contact length ratio with the Bi phase based on the total circumferential length of the hard particle, which are in contact with said Bi phase, are present in a ratio of 70% or more based on the entire number of the hard matter particles.

[Selected Drawing] Fig. 1